APPLICANT AMENDS HER APPLICATION AS FOLLOWS:

IN THE CLAIMS:

1. (Initial Amendment) A computer-implemented method for constructing and tangibly expressing a conic peak-point curve [~~with a computer~~] comprising [~~the steps of~~]:

(i) ~~(vi)~~ selecting a start point, a_0 on a computer image display of an implementing computer with a computer input device of the implementing computer;

(ii) ~~(vii)~~ selecting an end point, a_1 on the computer image display system with the computer input device;

(iii) ~~(viii)~~ selecting a start tangent direction, e_0 on the computer image display system with the computer input device;

(iv) ~~(ix)~~ selecting an end tangent direction, e_1 on the computer image display system with the computer input device; [~~and~~]

(v) ~~(x)~~ selecting a distance of a peak point, p from the chord between the start and end points, a_0 , a_1, on the computer image display system with the computer input device where the peak point is a point on the curve that is farthest away from the chord between the start and end points a_0, a_1, lying on a centerline segment connecting the center of the chord with a intersection point [t] r of rays extending in the start and end tangent directions e_0, e_1 respectively from the start and end points a_0, a_1, whereupon the implementing computer, using any suitable mathematical formulae, constructs a conic peak-point curve passing through the start point a_0, the peak point p, and the end point a_1, with the start tangent direction e_0 and the end tangent direction e_1; and

(vi) expressing tangibly the conic peak-point curve using any image display system controlled by the implementing computer.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

2. (Initial Amendment) A computer-implemented method for constructing and tangibly expressing a conic point-point curve [~~with a computer~~] comprising [~~the steps of~~]:

(i) ~~(v)~~ selecting a start point, a_0 on a computer image display system of an implementing computer with a computer input device of the implementing computer;

(ii) ~~(vi)~~ selecting a start tangent direction, e_0 on the computer image display system with the computer input device; [~~and~~]

(iii) ~~(vii)~~ selecting a peak point, p, whereupon the computer image display system, responsive to the implementing computer, [~~system~~] displays a guide area for locating possible end points loci defined by two rays intersecting at a point s that lies on one of [~~the~~] two rays that extends from the start point a_0 in the direction of the peak point p at twice (2X) the distance of the peak point p from the start point a_0, the remaining ray extending from s in a direction opposite to the start tangent direction e_0[,] ;

(iv) ~~(viii)~~ selecting with the computer input device any point in the guide area displayed on the computer image display system as an end point a_1 [of the] for a conic point-point curve, whereupon the implementing computer, using any suitable mathematical formulae [~~then~~] constructs a conic point-point curve passing through the start point, a_0, peak point, p, and the end point a_1 with the start tangent direction e_0, where [~~the~~] an end tangent direction e_1 is derived from a point of intersection of [~~start and end tangents~~] rays extending in the start and end tangent directions e_0, e_1, [~~that~~] which coincides with the intersection of a ray extending in the start tangent direction, e_0 and a centerline extending through the center of a chord between the start and end points a_0, a_1, and through the peak point, p; and

(v) expressing tangibly the constructed conic point-point curve using any image display system controlled by the implementing computer.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

3. (Initial Amendment) A computer-implemented method for constructing and tangibly expressing [~~of~~] a conic point-tangent curve [~~with a computer~~] comprising [~~the steps of~~]:

(i) ~~(vi)~~ selecting a start point, a_0 on a computer image display system of an implementing computer with a computer input device of the implementing computer;

(ii) ~~(vii)~~ selecting a start tangent direction, e_0 on the computer image display system with the computer input device;

(iii) ~~(viii)~~ selecting an end point, a_1 on the computer image display system with the computer input device;

(iv) ~~(ix)~~ selecting an end tangent direction, e_1 on the computer image display system with the computer input device; [~~and~~]

(v) ~~(x)~~ selecting a [~~fixed~~] weight, w for the curve with a computer input device of the implementing computer, whereupon the implementing computer, using any suitable mathematical formulae, [~~then~~] constructs a conic point-tangent curve passing through the start point, a_0, and the end point a_1 with the start tangent direction e_0 and the end tangent direction e_1, where a peak point p is calculated by the weight, [~~where the input weight~~] w, which is a parameter [~~defined as~~] defining a proportion between a distance, D_q of [~~a~~] the peak point p from a center point, q of a chord between the start and end points a_0, a_1 and a distance, D_r of the peak point p from an intersection point, [~~t~~] r of rays extending in the start and end tangent[s] directions e_0, e_1 respectively from the start and end point a_0,a_1; and

(vi) expressing tangibly the constructed conic point-tangent curve using any image display system controlled by the implementing computer.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

4. (Initial Amendment) The method of claim 3 wherein the selected [~~fixed~~] weight w is calculated from a fixed [~~cos-weight-v~~, an] arbitrarily defined positive number v, [~~parameter that utilizes a multiplication factor such as a trigonometric cosine relationship for computing a weight that limits a permitted range of peak points of the possible curves~~] multiplied by $\cos(\alpha/2)$, where α is an angle between the start and end tangent directions e_0, e_1 extending from a common point, and the constructed curve converges to limit as α approaches 180°.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

5. (Initial Amendment) A computer-implemented method for constructing and tangibly expressing a conic point curve [~~with a computer~~] comprising [~~the steps of~~]:

(i) (v) selecting a start point, a_0 on a computer image display system of an implementing computer with a computer input device of the implementing computer;

(ii) (vi) selecting a start tangent direction, e_0 on the computer image display system with the computer input device; [~~and~~]

(iii) (vii) selecting an end point, a_1 on the computer image display system with the computer input device; [~~, and~~]

(iv) (viii) selecting a [~~fixed~~] weight, w, with a computer input device of the implementing computer [~~for the curve~~], whereupon the implementing computer, using any suitable mathematical formulae, [~~then~~] constructs a conic point curve passing through the start point a_0 and the end point a_1 with the start tangent direction e_0, where an end tangent direction e_1 is [~~automatically~~] set by pre-defined [~~program~~] parameters selected with a computer input device, where a peak point p is calculated by the weight w, which is a parameter defining a proportion between a distance D_q of the peak point p from a center point q of a chord between the start and end points a_0, a_1, and a distance D_r of the peak point p from an intersection point r of rays extending in the start and end tangent directions e_0, e_1 respectively from the start and end point a_0, a_1; and

(v) expressing tangibly the constructed conic point curve using any image display system controlled by the implementing computer.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

6. (Initial Amendment) The method of claim 5 wherein the selected [~~fixed~~] weight w is calculated from a fixed [~~cos-weight-v~~, an] arbitrarily defined positive number v, [~~parameter that utilizes a multiplication factor such as a trigonometric cosine relationship for computing a weight that limits a permitted range of peak points of the possible curves~~] multiplied by $\cos(\alpha/2)$, where α is an angle between the start and end tangent directions e_0, e_1 extending from a common point, and the constructed curve converges to limit as α approaches 180°.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

7. (Initial Amendment) A computer-implemented method for constructing and tangibly expressing a conic curvature curve [~~with a computer~~] comprising [~~the steps of~~]:

(i) ~~(vii)~~ selecting a start point, a_0 on a computer image display system of an implementing computer with a computer input device of the implementing computer;

(ii) ~~(viii)~~ selecting a start tangent direction, e_0 on the computer image display system with the computer input device, [~~;~~] whereupon the implementing computer displays a guideline perpendicular to the start tangent direction, e_0 on the computer image display system for [~~the~~] a center m_0 of [~~the~~] a start curvature circle, r_0;

(iii) ~~(ix)~~ selecting a center m_0 of the start curvature circle, r_0 on the displayed guideline; and

(iv) ~~(x)~~ selecting an end point a_1 on the computer image display system with the computer input device; and

(v) ~~(xi)~~ selecting an end tangent direction, e_1[~~.~~] on the computer image display system with the computer input device, whereupon the implementing computer, using any suitable mathematical formulae, [~~draws~~] constructs a conic curvature curve through the [~~start and end points a_0, a_1~~] start point a_0 and the end point a_1, [~~with respective start and end tangent directions of e0, e1~~] with the start tangent direction e_0 and the end tangent direction e_1, with the center m_0 of the start curvature circle r_0, and [~~the~~] a center m_1 for [~~the~~] an end curvature circle r_1 [~~which are automatically determined~~] is calculated; and

(vi) expressing tangibly the constructed conic curvature curve using any image display system controlled by the implementing computer.

8. (Initial Amendment) A computer-implemented method for constructing and tangibly expressing a class of point curvature curves including cubic Bezier curves and conics [~~with a computer~~] comprising [~~the steps of~~]:

(i) ~~(iv)~~ selecting a start point, a_0 on a computer image display system of an implementing computer with a computer input device of the implementing computer;

(ii) ~~(v)~~ selecting a start tangent direction, e_0 on the computer image display system with the computer input device,[~~;~~] whereupon the implementing computer displays a guideline perpendicular to the start tangent direction, e_0 for [~~the~~] a center m_0 of [~~the~~] a start curvature circle r_0 on the computer image display system;

(iii) ~~(vi)~~ selecting a center m_0 of [~~the~~] a start curvature circle r_0 on the displayed guideline on the computer image display system with the computer input device,; and

(iv) ~~(xii)~~ selecting an end point a_1 on the computer image display system with the computer input device, whereupon the implementing computer, using any suitable mathematical formulae, [~~then~~] constructs a point curvature curve passing through the [~~start and end points a_0, a_1~~] the start point a_0 and the end point a_1, with the start tangent direction e_0 and the center m_0 of the start curvature circle r_0, where an end tangent direction e_1 is [~~automatically~~] set by [~~selected~~] pre-defined [program] parameters selected with a computer input device; and

(v) expressing tangibly the constructed point curvature curve using any image display system controlled by the implementing computer.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

9. (Initial Amendment) The method of claim 8 wherein the constructed curve is a conic and a center m_1 of an end curvature circle r_1 [~~are~~] is thereby automatically determined.

10. (Initial Amendment) The method of claim 8 wherein the constructed curve is a cubic Bezier curve, and a center m_1 of the end curvature circle r_1 is set by a [~~selected~~] defined [~~program~~] parameter selected using a computer input device.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

11. (Initial Amendment) A computer-implemented method for constructing and tangibly expressing a Bezier point-tangent curve [~~with a computer~~] comprising [~~the steps of~~]:

(i) selecting a start point, a_0 on a computer image display system of an implementing computer with a computer input device of the implementing computer;

(ii) selecting a start tangent direction, e_0 on the computer image display system with the computer input device;

(iii) selecting an end point, a_1 on the computer image display system with the computer input device;

(iv) selecting an end tangent direction, e_1 on the computer image display system with the computer input device; [~~and~~]

(v) selecting a [~~fixed~~] weight, w with an input device of the implementing computer [~~for the curve~~], whereupon the implementing computer, using any suitable mathematical formulae, [~~then~~] constructs a Bezier point-tangent curve passing through the start point, a_0, and the end point a_1 with the start tangent direction e_0 and the end tangent direction e_1, [~~and~~] having a peak point p calculated to lie on a centerline segment connecting a center point q of the chord between the start and end points a_0, a_1 with an intersection point, [t] r of rays extending in the start and end tangent[s] directions e_0, e_1 from the start and end point a_0, a_1 respectively, ~~where the input weight w is a parameter defined as~~] the weight, w specifying a proportion between a distance, D_q of a peak point p from the center point q of a chord and a distance, D_r of the peak point p from the intersection point, [t] r of the start and end tangents;

(vi) expressing tangibly the constructed Bezier point-tangent curve using any image display system controlled by the implementing computer.

12. (Initial Amendment) The method of claim 11 wherein the selected [~~fixed~~] weight w is calculated from a fixed [~~cos-weight v~~, an] arbitrarily defined positive number v, [~~parameter that utilizes a multiplication factor such as a trigonometric cosine relationship for computing a weight that limits a permitted range of peak points of the possible curves~~] multiplied by $\cos(\alpha/2)$, where α is an angle between the start and end tangent directions e_0, e_1 extending from a common point, and the constructed curve converges to limit as α approaches 180°.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

13. (Initial Amendment) A computer-implemented method for constructing and tangibly expressing a Bezier point curve [~~with a computer~~] comprising [~~the steps of~~]:

(i) (~~ix~~) selecting a start point, a_0 on a computer image display system of an implementing computer with a computer input device of the implementing computer;

(ii) (~~x~~) selecting a start tangent direction, e_0 on the computer image display system with the computer input device;

(iii) (~~xi~~) selecting an end point, a_1 on the computer image display system with the computer input device;

(iv) (~~xii~~) selecting a fixed weight, w, [~~for the curve~~] with an input device of the implementing computer, whereupon the implementing computer, using any suitable mathematical formulae, [~~then~~] constructs a Bezier point curve passing through the start point a_0 with the start tangent direction e_0, and the end point a_1, where an end tangent direction e_1 is [~~automatically~~] set by [~~selected~~] pre-defined [~~program~~] parameters selected with an input device of the implementing computer, having a peak point p calculated to lie on a centerline segment connecting a center point q of the chord between the start and end points a_0, a_1 with an intersection point, [t] r of rays extending in the start and end tangent directions e_0, e_1 from the start and end point a_0, a_1 respectively, the weight, w specifying a proportion between a distance, D_q of a peak point p from the center point q of a chord and a distance, D_r of the peak point p from the intersection point, [t] r of the start and end tangents; and

(v) expressing tangibly the constructed Bezier point curve using any image display system controlled by the implementing computer.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

14. (Initial Amendment) The method of claim 13 wherein the selected [~~fixed~~] weight w is calculated from a fixed [~~cos-weight v~~, an] arbitrarily defined positive number v, [~~parameter that utilizes a multiplication factor such as a trigonometric cosine relationship for computing a weight that limits a permitted range of peak points of the possible curves~~] multiplied by $\cos(\alpha/2)$, where α is an angle between the start and end tangent directions e_0, e_1 extending from a common point, and the constructed curve converges to limit as α approaches 180°.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com

15. (New Claim) A computer-implemented method for constructing and tangibly expressing a simple point-point curve comprising:

(i) selecting a start point, a_0 on a computer image display system of an implementing computer with a computer input device of the implementing computer;

(ii) selecting a peak point, p on a computer image display system of an implementing computer with a computer input device, where the peak point is a point on the curve that is farthest away from the chord between the start and end points a_0, a_1;

(iii) selecting an end point a_1 on a computer image display system of an implementing computer with a computer input device;

(iv) selecting a weight w for the curve with a computer input device of the implementing computer, whereupon the implementing computer, using any suitable mathematical formulae, constructs a simple point-point curve passing through the start point, a_0, the peak point, p, and the end point a_1, where, using the weight w, a point r is derived on a centerline extending from a center point, q, of a chord between the start and end points, a_0, a_1, and through the peak point, p, establishing an intersection of rays extending through the start and end points, a_0, a_1, setting start tangent and an end tangent directions, e_0, e_1; and

(iv) expressing tangibly the constructed point-point curve using any image display system controlled by the implementing computer.

477 Ninth Ave Ste. 112 San Mateo, Ca. 94402-1854 Tel.: 650 348-8652 Fax: 650 348-8655 Email: den@attycubed.com